Syllabus.

GREAT ATLANTIC & PACIFIC TEA CO. v. SUPER-MARKET EQUIPMENT CORP.

CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE SIXTH CIRCUIT.

No. 32. Argued October 18-19, 1950.—Decided December 4, 1950.

- Claims 4, 5 and 6 of the Turnham patent No. 2,242,408, for a cashier's counter and movable frame for "cash and carry" grocery stores, held invalid for want of invention. Pp. 148-154.
 - (a) The extension of the counter alone was not sufficient to sustain the patent, unless, together with the other old elements, it made up a new combination patentable as such. Pp. 149-150.
 - (b) The mere combination of a number of old parts or elements which, in combination, perform or produce no new or different function or operation than that theretofore performed or produced by them, is not patentable invention. P. 151.
 - (c) This patentee has added nothing to the total stock of knowledge, but has merely brought together segments of prior art and claims them in congregation as a monopoly. P. 153.
 - (d) Commercial success without invention does not make patentability. P. 153.
- (e) The concurrence of the two courts below in holding the patent claims valid does not preclude this Court from overruling them, where, as in this case, a standard of invention appears to have been used that is less exacting than that required where a combination is made up entirely of old components. Pp. 153-154. 179 F. 2d 636, reversed.

The District Court sustained the validity of certain patent claims. 78 F. Supp. 388. The Court of Appeals affirmed. 179 F. 2d 636 This Court granted certiorari. 339 U. S. 947. Reversed, p. 154.

John H. Glaccum argued the cause for petitioner. With him on the brief was Edwin J. Balluff.

Townsend F. Beaman argued the cause for respondent. With him on the brief was Lloyd W. Patch.

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Mr. Justice Jackson delivered the opinion of the Court.

Two courts below have concurred in holding three patent claims to be valid, and it is stipulated that, if valid, they have been infringed. The issue, for the resolution of which we granted certiorari, is whether they applied correct criteria of invention. We hold that they have not, and that by standards appropriate for a combination patent these claims are invalid.

¹ Claims 4, 5, and 6 of the Turnham patent No. 2,242,408, which are involved in the controversy, read as follows:

[&]quot;4. A checker's stand including a counter of the character described, an open bottom pusher frame thereon, means to guide said frame in sliding movement so that goods placed on the end of said counter within said frame may be pushed along the counter in a group to a position adjacent the checker by movement of said frame.

[&]quot;5. A cashier's counter for cash and carry type of grocery comprising a portion spaced from the cashier's stand and upon which the merchandise may be deposited and arranged, a bottomless three sided frame on said portion and within which the merchandise is deposited and arranged, means whereby said frame is movable on said counter from said portion to a position adjacent the cashier's stand so that the merchandise may thus be moved as a group to a point where it may be conveniently observed, counted and registered by the cashier.

[&]quot;6. A cashier's counter for cash and carry type of grocery comprising a portion spaced from the cashier's stand and upon which the merchandise may be deposited and arranged, a bottomless frame on said portion and within which the merchandise is deposited and arranged, means whereby said frame is movable on said counter from said portion to a position adjacent the cashier's stand so that the merchandise may thus be moved as a group to a point where it may be conveniently observed, counted and registered by the cashier, said frame being open at the end adjacent the cashier's stand and readily movable to be returned over said portion so as to receive the merchandise of another customer while the cashier is occupied with the previous group."

² 339 U.S. 947.

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Stated without artifice, the claims assert invention of a cashier's counter equipped with a three-sided frame, or rack, with no top or bottom, which, when pushed or pulled, will move groceries deposited within it by a customer to the checking clerk and leave them there when it is pushed back to repeat the operation. It is kept on the counter by guides. That the resultant device works as claimed, speeds the customer on his way, reduces checking costs for the merchant, has been widely adopted and successfully used, appear beyond dispute.

The District Court explicitly found that each element in this device was known to prior art. "However," it found, "the conception of a counter with an extension to receive a bottomless self-unloading tray with which to push the contents of the tray in front of the cashier was a decidedly novel feature and constitutes a new and useful combination." ³

The Court of Appeals regarded this finding of invention as one of fact, sustained by substantial evidence, and affirmed it as not clearly erroneous. It identified no other new or different element to constitute invention and overcame its doubts by consideration of the need for some such device and evidence of commercial success of this one.

Since the courts below perceived invention only in an extension of the counter, we must first determine whether they were right in so doing. We think not. In the first place, the extension is not mentioned in the claims, except, perhaps, by a construction too strained to be consistent with the clarity required of claims which define the boundaries of a patent monopoly. 38 Stat. 958, 35 U. S. C. § 33; United Carbon Co. v. Binney & Smith Co., 317 U. S. 228; General Electric Co. v. Wabash Corp., 304

³ Finding of Fact No. 15 of District Judge Picard, whose opinion appears at 78 F. Supp. 388.

U. S. 364. In the second place, were we to treat the extension as adequately disclosed, it would not amount to an invention. We need not go so far as to say that invention never can reside in mere change of dimensions of an old device, but certainly it cannot be found in mere elongation of a merchant's counter—a contrivance which, time out of mind, has been of whatever length suited the merchant's needs. In the third place, if the extension itself were conceded to be a patentable improvement of the counter, and the claims were construed to include it, the patent would nevertheless be invalid for overclaiming the invention by including old elements, unless, together with its other old elements, the extension made up a new combination patentable as such. Bassick Mfg. Co. v. Hollingshead Co., 298 U. S. 415, 425; Carbice Corp. v. American Patents Development Corp., 283 U. S. 27. Thus, disallowing the only thing designated by the two courts as an invention, the question is whether the combination can survive on any other basis. What indicia of invention should the courts seek in a case where nothing tangible is new, and invention, if it exists at all, is only in bringing old elements together?

While this Court has sustained combination patents,⁴ it never has ventured to give a precise and comprehensive definition of the test to be applied in such cases. The voluminous literature which the subject has excited discloses no such test.⁵ It is agreed that the key to patent-

⁴E. g., Keystone Mfg. Cc. v. Adams, 151 U. S. 139; Diamond Rubber Co. v. Consolidated Tire Co., 220 U. S. 428.

⁵ The Index to Legal Periodicals reveals no less than sixty-four articles relating to combination patents and the theory and philosophy underlying the patent laws. Among the many texts are 1 Walker on Patents (Deller's ed. 1937); Stedman, Patents; Toulmin, Handbook of Patents; Merwin, Patentability of Inventions; Amdur, Patent Law and Practice; and 1 Roberts, Patentability and Patent Interpretation.

ability of a mechanical device that brings old factors into cooperation is presence or lack of invention. In course of time the profession came to employ the term "combination" to imply its presence and the term "aggregation" to signify its absence, thus making antonyms in legal art of words which in ordinary speech are more nearly synonyms. However useful as words of art to denote in short form that an assembly of units has failed or has met the examination for invention, their employment as tests to determine invention results in nothing but confusion. The concept of invention is inherently elusive when applied to combination of old elements. This, together with the imprecision of our language, have counselled courts and text writers to be cautious in affirmative definitions or rules on the subject.6

The negative rule accrued from many litigations was condensed about as precisely as the subject permits in Lincoln Engineering Co. v. Stewart-Warner Corp., 303 U. S. 545, 549: "The mere aggregation of a number of old parts or elements which, in the aggregation, perform or produce no new or different function or operation than that theretofore performed or produced by them, is not patentable invention." To the same end is Toledo

⁶ With respect to the word "invention," Mr. Justice Brown said: "The truth is the word cannot be defined in such manner as to afford any substantial aid in determining whether a particular device involves an exercise of the inventive faculty or not. In a given case we may be able to say that there is present invention of a very high order. In another we can see that there is lacking that impalpable something which distinguishes invention from simple mechanical skill. Courts, adopting fixed principles as a guide, have by a process of exclusion determined that certain variations in old devices do or do not involve invention; but whether the variation relied upon in a particular case is anything more than ordinary mechanical skill is a question which cannot be answered by applying the test of any general definition." McClain v. Ortmayer, 141 U.S. 419, 427.

Pressed Steel Co. v. Standard Parts, Inc., 307 U. S. 350, and Cuno Engineering Corp. v. Automatic Devices Corp., 314 U. S. 84. The conjunction or concert of known elements must contribute something; only when the whole in some way exceeds the sum of its parts is the accumulation of old devices patentable. Elements may, of course, especially in chemistry or electronics, take on some new quality or function from being brought into concert, but this is not a usual result of uniting elements old in mechanics. This case is wanting in any unusual or surprising consequences from the unification of the elements here concerned, and there is nothing to indicate that the lower courts scrutinized the claims in the light of this rather severe test.

Neither court below has made any finding that old elements which made up this device perform any additional or different function in the combination than they perform out of it. This counter does what a store counter always has done—it supports merchandise at a convenient height while the customer makes his purchases and the merchant his sales. The three-sided rack will draw or push goods put within it from one place to another—just what any such a rack would do on any smooth surface—and the guide rails keep it from falling or sliding off from the counter, as guide rails have ever done. Two and two have been added together, and still they make only four.

Courts should scrutinize combination patent claims with a care proportioned to the difficulty and improbability of finding invention in an assembly of old elements. The function of a patent is to add to the sum of useful knowledge. Patents cannot be sustained when, on the contrary, their effect is to subtract from former resources freely available to skilled artisans. A patent for a combination which only unites old elements with no change in their respective functions, such as is presented here, obviously withdraws what already is known into

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the field of its monopoly and diminishes the resources available to skillful men. This patentee has added nothing to the total stock of knowledge, but has merely brought together segments of prior art and claims them in congregation as a monopoly.

The Court of Appeals and the respondent both lean heavily on evidence that this device filled a long-felt want and has enjoyed commercial success. But commercial success without invention will not make patentability. Toledo Pressed Steel Co. v. Standard Parts, Inc., supra. The courts below concurred in finding that every element here claimed (except extension of the counter) was known to prior art. When, for the first time, those elements were put to work for the supermarket type of stores, although each performed the same mechanical function for them that it had been known to perform, they produced results more striking, perhaps, than in any previous utilization. To bring these devices together and apply them to save the time of customer and checker was a good idea, but scores of progressive ideas in business are not patentable. and we conclude on the findings below that this one was not.

It is urged, however, that concurrence of two courts below, in holding the patent claims valid, concludes this Court. A recent restatement of the "two-court rule" reads, "A court of law, such as this Court is, rather than a court for correction of errors in fact finding, cannot undertake to review concurrent findings of fact by two courts below in the absence of a very obvious and exceptional showing of error." Graver Tank Co. v. Linde Co., 336 U. S. 271, 275. The questions of general importance considered here are not contingent upon resolving conflicting testimony, for the facts are little in dispute. We set aside no finding of fact as to invention, for none has been made except as to the extension of the counter, which

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cannot stand as a matter of law. The defect that we find in this judgment is that a standard of invention appears to have been used that is less exacting than that required where a combination is made up entirely of old components. It is on this ground that the judgment below is

Reversed.

Mr. Justice Douglas, with whom Mr. Justice Black agrees, concurring.

It is worth emphasis that every patent case involving validity presents a question which requires reference to a standard written into the Constitution. Article I, § 8, contains a grant to the Congress of the power to permit patents to be issued. But, unlike most of the specific powers which Congress is given, that grant is qualified. The Congress does not have free rein, for example, to decide that patents should be easily or freely given. The Congress acts under the restraint imposed by the statement of purpose in Art. I, § 8. The purpose is "To promote the Progress of Science and useful Arts" The means for achievement of that end is the grant for a limited time to inventors of the exclusive right to their inventions.

Every patent is the grant of a privilege of exacting tolls from the public. The Framers plainly did not want those monopolies freely granted. The invention, to justify a patent, had to serve the ends of science—to push back the frontiers of chemistry, physics, and the like; to make a distinctive contribution to scientific knowledge. That is why through the years the opinions of the Court commonly have taken "inventive genius" as the test.* It

^{*&}quot;Inventive genius"—Mr. Justice Hunt in Reckendorfer v. Faber, 92 U. S. 347, 357; "Genius or invention"—Mr. Chief Justice Fuller in Smith v. Whitman Saddle Co., 148 U. S. 674, 681; "Intuitive genius"—Mr. Justice Brown in Potts v. Creager, 155 U. S. 597, 607; "Inventive

is not enough that an article is new and useful. The Constitution never sanctioned the patenting of gadgets. Patents serve a higher end—the advancement of science. An invention need not be as startling as an atomic bomb to be patentable. But it has to be of such quality and distinction that masters of the scientific field in which it falls will recognize it as an advance. Mr. Justice Bradley stated in Atlantic Works v. Brady, 107 U. S. 192, 200, the consequences of a looser standard:

"It was never the object of those laws to grant a monopoly for every trifling device, every shadow of a shade of an idea, which would naturally and spontaneously occur to any skilled mechanic or operator in the ordinary progress of manufactures. Such an indiscriminate creation of exclusive privileges tends rather to obstruct than to stimulate invention. creates a class of speculative schemers who make it their business to watch the advancing wave of improvement, and gather its foam in the form of patented monopolies, which enable them to lay a heavy tax upon the industry of the country, without contributing anything to the real advancement of the It embarrasses the honest pursuit of business with fears and apprehensions of concealed liens and unknown liabilities to lawsuits and vexatious accountings for profits made in good faith."

The standard of patentability is a constitutional standard; and the question of validity of a patent is a question of law. Mahn v. Harwood, 112 U. S. 354, 358. The Court fashioned in Graver Mfg. Co. v. Linde Co., 336 U. S.

genius"—Mr. Justice Stone in Concrete Appliances Co. v. Gomery, 269 U. S. 177, 185; "Inventive genius"—Mr. Justice Roberts in Mantle Lamp Co. v. Aluminum Products Co., 301 U. S. 544, 546; Cuno Corp. v. Automatic Devices Corp., 314 U. S. 84, 91, "the flash of creative genius, not merely the skill of the calling."

271, 275, a rule for patent cases to the effect that this Court will not disturb a finding of invention made by two lower courts, in absence of a very obvious and exceptional showing of error. That rule, imported from other fields, never had a place in patent law. Having served its purpose in Graver Mfg. Co. v. Linde Co., it is now in substance rejected. The Court now recognizes what has long been apparent in our cases: that it is the "standard of invention" that controls. That is present in every case where the validity of a patent is in issue. It is that question which the Court must decide. No "finding of fact" can be a substitute for it in any case. The question of invention goes back to the constitutional standard in every We speak with final authority on that constitutional issue as we do on many others.

The attempts through the years to get a broader, looser conception of patents than the Constitution contemplates have been persistent. The Patent Office, like most administrative agencies, has looked with favor on the opportunity which the exercise of discretion affords to expand its own jurisdiction. And so it has placed a host of gadgets under the armour of patents—gadgets that obviously have had no place in the constitutional scheme of advancing scientific knowledge. A few that have reached this Court show the pressure to extend monopoly to the simplest of devices:

Hotchkiss v. Greenwood, 11 How. 248: Dec knob made of clay rather than metal or wood, where different shaped door knobs had previously been made of clay.

Rubber-Tip Pencil Co. v. Howard, 20 Wall. 498: Rubber caps put on wood pencils to serve as erasers.

Collar Co. v. Van Dusen, 23 Wall. 530: Making collars of parchment paper where linen paper and linen had previously been used.

Douglas, J., concurring.

Brown v. Piper, 91 U. S. 37: A method for preserving fish by freezing them in a container operating in the same manner as an ice cream freezer.

Reckendorfer v. Faber, 92 U. S. 347: Inserting a piece of rubber in a slot in the end of a wood pencil to serve as an eraser.

Dalton v. Jennings, 93 U. S. 271: Fine thread placed across open squares in a regular hairnet to keep hair in place more effectively.

Double-Pointed Tack Co. v. Two Rivers Mfg. Co., 109 U. S. 117: Putting a metal washer on a wire staple.

Miller v. Foree, 116 U. S. 22: A stamp for impressing initials in the side of a plug of tobacco.

Preston v. Manard, 116 U. S. 661: A hose reel of large diameter so that water may flow through hose while it is wound on the reel.

Hendy v. Miners' Iron Works, 127 U. S. 370: Putting rollers on a machine to make it moveable.

St. Germain v. Brunswick, 135 U. S. 227: Revolving cue rack.

Shenfield v. Nashawannuck Mfg. Co., 137 U. S. 56: Using flat cord instead of round cord for the loop at the end of suspenders.

Florsheim v. Schilling, 137 U. S. 64: Putting elastic gussets in corsets.

Cluett v. Claflin, 140 U. S. 180: A shirt bosom or dickey sewn onto the front of a shirt.

Adams v. Bellaire Stamping Co., 141 U.S. 539: A lantern lid fastened to the lantern by a hinge on one side and a catch on the other.

Patent Clothing Co. v. Glover, 141 U. S. 560: Bridging a strip of cloth across the fly of pantaloons to reinforce them against tearing.

Pope Mfg. Co. v. Gormully Mfg. Co., 144 U. S. 238: Placing rubber hand grips on bicycle handlebars.

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Knapp v. Morss, 150 U.S. 221: Applying the principle of the umbrella to a skirt form.

Morgan Envelope Co. v. Albany Perforated Wrapping Paper Co., 152 U. S. 425: An oval rather than cylindrical toilet paper roll, to facilitate tearing off strips.

Dunham v. Dennison Mfg. Co., 154 U. S. 103: An envelope flap which could be fastened to the envelope in such a fashion that the envelope could be opened without tearing.

The patent involved in the present case belongs to this list of incredible patents which the Patent Office has spawned. The fact that a patent as flimsy and as spurious as this one has to be brought all the way to this Court to be declared invalid dramatically illustrates how far our patent system frequently departs from the constitutional standards which are supposed to govern.